SEQUENCE LISTING

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Met Met Ser Lys Tyr Lys Tyr Arg Asp Leu Thr Val Arg Gln Thr Val

1 5 10 15
aat gtc atc gct atg tac aaa gat ctc aaa cct gta ttg gat tca tat Asn Val Ile Ala Met Tyr Lys Asp Leu Lys Pro Val Leu Asp Ser Tyr 20 25 30
                                                                               156
                                                                               204
gtt ttt aat gat ggc agt tcc agg gag ctg gtg aac ctc act ggt aca
Val Phe Asn Asp Gly Ser Ser Arg Glu Leu Val Asn Leu Thr Gly Thr
atc cca gtg cgt tat cga ggt aat ata tat aat att cca ata tgc ctg
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Ile Pro Val Arg Tyr Arg Ğly Asn Ile Tyr Asn Ile Pro Ile Cys Leu
50 55 60
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tgg Trp 65	ctg Leu	ctg Leu	gac Asp	aca Thr	tac Tyr 70	cca Pro	tat Tyr	aac Asn	ccc Pro	cct Pro 75	atc Ile	tgt Cys	ttt Phe	gtt Val	aag Lys 80	300
cct Pro	act Thr	agt Ser	tca Ser	atg Met 85	act Thr	att Ile	aaa Lys	aca Thr	gga Gly 90	aag Lys	cat His	gtg Val	gat Asp	gca Ala 95	aat Asn	348
ggg Gly	aaa Lys	atc Ile	tac Tyr 100	cta Leu	cct Pro	tat Tyr	cta Leu	cat His 105	gac Asp	tgg Trp	aaa Lys	cat His	cca Pro 110	cgg Arg	tca Ser	396
					att Ile											444
					cgg Arg											492
aca Thr 145	gca Ala	aca Thr	ggg Gly	cca Pro	cca Pro 150	aat Asn	acc Thr	tcc Ser	tac Tyr	atg Met 155	cca Pro	ggc Gly	atg Met	cca Pro	agt Ser 160	540
gga Gly	atc Ile	tct Ser	gca Ala	tat Tyr 165	cca Pro	tct Ser	gga Gly	tac Tyr	cct Pro 170	ccc Pro	aac Asn	ccc Pro	agt Ser	ggt Gly 175	tat Tyr	588
cct Pro	ggc Gly	tgt Cys	cct Pro 180	tac Tyr	cca Pro	cct Pro	gct Ala	ggc Gly 185	cca Pro	tac Tyr	cct Pro	gcc Ala	aca Thr 190	aca Thr	agc Ser	636
					cag Gln											684
gat Asp	ggc Gly 210	aca Thr	atc Ile	agt Ser	gag Glu	gac Asp 215	act Thr	atc Ile	cgt Arg	gca Ala	tct Ser 220	ctc Leu	atc Ile	tca Ser	gca Ala	732
					aga Arg 230											780
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ggc Gly	cac His	cag Gln	aaa Lys 260	ctg Leu	gaa Glu	gag Glu	atg Met	gtc Val 265	acc Thr	cgc Arg	tta Leu	gat Asp	caa Gln 270	gaa Glu	gta Val	876
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					att Ile 310				Pro		Tyr					1020

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Gly Glu Ala Leu Arg Arg Gly Val Ile Asp Leu Asp Val Phe Leu Lys
                                                                       1116
             340
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cac gtc cgc ctc ctg tcc cgt aaa cag ttc cag cta agg gca cta atg
His Val Arg Leu Leu Ser Arg Lys Gln Phe Gln Leu Arg Ala Leu Met
355 360 365
caa aag gca agg aag act gcg ggc ctt agt gac ctc tac tgacatgtgc
                                                                      1213
Gln Lys Ala Arg Lys Thr Ala Gly Leu Ser Asp Leu Tyr
                         375
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tgtcagctgg agaccgacct ctccgtaaag cattcttttc ttcttctttt tctcatcagt 1273
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Ile Pro Val Arg Tyr Arg Gly Asn Ile Tyr Asn Ile Pro Ile Cys Leu
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Trp Leu Leu Asp Thr Tyr Pro Tyr Asn Pro Pro Ile Cys Phe Val Lys 75 80
Pro Thr Ser Ser Met Thr Ile Lys Thr Gly Lys His Val Asp Ala Asn
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Gly Lys Ile Tyr Leu Pro Tyr Leu His Asp Trp Lys His Pro Arg Ser
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Glu Leu Leu Glu Leu Ile Gln Ile Met Ile Val Ile Phe Gly Glu Glu
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Thr Ala Thr Gly Pro Pro Asn Thr Ser Tyr Met Pro Gly Met Pro Ser
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Gly Ile Ser Ala Tyr Pro Ser Gly Tyr Pro Pro Asn Pro Ser Gly Tyr
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Pro Gly Cys Pro Tyr Pro Pro Ala Gly Pro Tyr Pro Ala Thr Thr Ser
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                                                   205
                              200
Asp Gly Thr Ile Ser Glu Asp Thr Ile Arg Ala Ser Leu Ile Ser Ala
210 215 220
                         215
    210
Val Ser Asp Lys Leu Arg Trp Arg Met Lys Glu Glu Met Asp Gly Ala
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                                          235
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Gln Ala Glu Leu Asn Ala Leu Lys Arg Thr Glu Glu Asp Leu Lys Lys
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Gly His Gln Lys Leu Glu Glu Met Val Thr Arg Leu Asp Gln Glu Val
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Page 3

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Ala Glu Val Asp Lys Asn Ile Glu Leu Leu Lys Lys Lys Asp Glu Glu
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                                  280
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Ile Asp Glu Val Ile Ile Pro Thr Ala Pro Leu Tyr Lys Gln Ile Leu 305 310 315 320
Asn Leu Tyr Ala Glu Glu Asn Ala Ile Glu Asp Thr Ile Phe Tyr Leu
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                                            330
Gly Glu Ala Leu Arg Arg Gly Val Ile Asp Leu Asp Val Phe Leu Lys
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                                              60
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                                     90
Ile Lys Thr Gly Lys His Val Asp Ala Asn Gly Lys Ile Tyr Leu Pro
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Tyr Leu His Glu Trp Lys His Pro Gln Ser Asp Leu Leu Gly Leu Ile
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                             120
                                                  125
Gln Val Met Ile Val Val Phe Gly Asp Glu Pro Pro Val Phe Ser Arg
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Pro Ile Ser Ala Ser Tyr Pro Pro Tyr Gln Ala Thr Gly Pro Pro Asn
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Thr Ser Tyr Met Pro Gly Met Pro Gly Gly Ile Ser Pro Tyr Pro Ser
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Gly Tyr Pro Pro Asn Pro Ser Gly Tyr Pro Gly Cys Pro Tyr Pro Pro
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Gly Gly Pro Tyr Pro Ala Thr Thr Ser Ser Gln Tyr Pro Ser Gln Pro
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Arg Met Lys Glu Glu Met Asp Arg Ala Gln Ala Glu Leu Asn Ala Leu
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                                      250
Lys Arg Thr Glu Glu Asp Leu Lys Lys Gly His Gln Lys Leu Glu Glu
                                  265
                                                       270
            260
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Glu Leu Leu Lys Lys Lys Asp Glu Glu Leu Ser Ser Ala Leu Glu Lys
                         295
                                              300
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Ala Ile Glu Asp Thr Ile Phe Tyr Leu Gly Glu Ala Leu Arg Arg Gly
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            340
                                  345
Val Ile Asp Leu Asp Val Phe Leu Lys His Val Arg Leu Leu Ser Arg _ 355 _ 360 _ 365
Lys Gln Phe Gln Leu Arg Ala Leu Met Gln Lys Ala Arg Lys Thr Ala
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Gly Leu Ser Asp Leu Tyr
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Trp Leu Leu Asp Thr Tyr Pro Tyr Asn Pro Pro Ile Cys Phe Val Lys
                    7Ó
                                                              80
                                         75
Pro Thr Ser Ser Met Thr Ile Lys Thr Gly Lys His Val Asp Ala Asn 85 90 95
Gly Lys Ile Tyr Leu Pro Tyr Leu His Glu Trp Lys His Pro Gln Ser
            100
                                                      110
                                 105
Asp Leu Leu Gly Leu Ile Gln Val Met Ile Val Val Phe Gly Asp Glu
                             120
                                                 125
Pro Pro Val Phe Ser Arg Pro Ile Ser Ala Ser Tyr Pro Pro Tyr Gln
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325 330 335 Glu Ala Leu Arg Arg Gly Val Ile Asp Leu Asp Val Phe Leu Lys His 350 Val Arg Leu Leu Ser Arg Lys Gln Phe Gln Leu Arg Ala Leu Met Gln 355 360 365 360 Lys Ala Arg Lys Thr Ala Gly Leu Ser Asp Leu Tyr 370 375 380